REMARKS

The present application includes claims 1-17 and 20. The Examiner has rejected claims 1-17 and 20. No claims have been amended by this response. Based in part on the remarks below, the Applicant respectfully submits that the pending claims define allowable subject matter, and the Examiner's rejections have been overcome.

Claims 1-17 and 20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Wagner (U.S. Patent No. 4,903,201) in view of Daughtery (U.S. Patent Pub. No. 2001/0056392) and further in view of Mosler et al. (U.S. Patent No. 6,304,858).

History

Claims 1-17 and 20 remain pending in the application. Previously, the Examiner had allowed claims 1-18 and 20. Claim 19 had been rejected, so claim 19 was cancelled by the Applicant to proceed with allowance. The Hawkins, Daughtery and Mosler references had been cited to and considered by the Examiner in obtaining allowance of claims 1-18 and 20. The Hawkins and Mosler references were disclosed to the Examiner in an IDS filed by the Applicant's attorneys on January 9, 2003. The parent patent of the Daughtery application was previously relied upon by the in an office action mailed on March 18, 2002, which was overcome by the Applicant. Then, in 2003, the application was selected for a second tier review. A rejection of claims 1-18 and 20 was issued on July 8, 2005.

The Applicant filed a request for pre-appeal brief review, and the panel ordered that prosecution be reopened. As a result of re-opened prosecution, a 1990 patent that

simply introduces the idea of a computerized system has been added to purportedly cure the many defects in the previously-cited string of references. However, the simple addition of a computer system is not enough to teach or suggest the plurality of steps and computations recited in the pending claims of the present application. The Applicant again submits that the collection of steps and computations recited in the pending claims to not only provide an electronic medium for trading, as the prior art has done, but to also determine a settlement amount based on a variety factors and completing the trade, including computer-assisted transfer of funds, is neither taught nor suggested by any of the cited references, taken either alone or in various forms of combination. Therefore, the Applicant again submits that the original allowance of these claims in 2003 should stand.

The Applicant now turns to the rejection of claim 1-17 and 20 under 35 U.S.C. 103(a) as being unpatentable over Wagner in view of Daughtery and further in view of Mosler.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. MPEP 706.02(j). Second, there must be a reasonable expectation of success. MPEP 706.02(j). Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. MPEP 706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on

applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991); MPEP 706.02(j).

Wagner

Wagner relates to a computerized open outcry exchange system for transacting sales of a particular futures commodity contract by members of a futures trading exchange wherein bids to purchase or offers to sell the particular commodity contract are made by the members through remote terminals and the exchange computer automatically matches offers and bids to complete the transaction. Abstract. As the Examiner points out, Wagner fails to teach key elements of the claim relating to determination of the settlement price based on a base tick value, an expiration time, computation of a discount factor from the settlement price and determining an actual ticket value. Wagner also does not teach or suggest specifying an amount of money a clearing entity must transfer between the buyer and the seller for clearing the convex futures contract by applying the actual tick value to a difference between the trade price data and the settlement price. Thus, Wagner teaches a computer system for use in trading but teaches nothing else with respect to the claimed invention.

Daughtery

As previously discussed in other actions, Daugherty calculates a call or put option premium. (Abstract; [0001]; [0031]; [0073]). According to Daugherty, an option premium exists that would cause many dealing in margin positions and expiring options to find great benefits in transacting expirationless options. ([0032]). Daughtery stresses

that its method is an unscientific method of dealing with expirationless options. ([0032]). These are not convex futures contracts.

Daughtery calculates a call or put option premium (Abstract; [0002]; [0031]; [0073]). Daughtery uses a standard expiring option premium algorithm to discount time to price a purchased and sold option ([0036]; [0076]). A user enters a current asset price, a current risk-free interest rate, historic price volatility of the asset, an exercise price for the asset, an option type (call or put), and a margin requirement for the asset (pp. 7-8). Dollar amount price movement is stored in a tick variable ([0218]). The system uses a standard algorithm selected by the user to process this information to issue a buy or sell hard copy for the user to take to an exchange ([0134]).

The system of Daughtery discounts the effects of time. ([0033-34]). Daughtery uses a standard expiring option premium algorithm to discount time to price a purchased and sold option. ([0036]; [0076]). The tick variable of Daughtery houses the standard dollar price movement based on time until expiration of the option. ([0128]; [0130]). The tick value of Daughtery is not a computed, changing value for the transaction. The tick value of Daughtery does not include a base tick value and a computed actual tick value, as recited in the pending claims of the present application.

Daughtery mentions use with forward or futures contracts [0184-85] but not the novel convex futures contracts developed by the Applicant. Additionally, in Daughtery there is no computing discount factor from settlement price and no determining an actual tick value from discount factor and base tick value. The glossary of Daughtery provides no information to substantiate a discount factor calculation. Thus, Daughtery does not teach or suggest all of the limitations of claims 1-18 and 20.

As the Examiner has stated, the above cited references (Wagner and Daughtery) do not teach a method of computing a discount factor from the settlement price and determining an actual tick value by applying the discount factor to the base tick value. Neither reference teaches or suggests a convex futures contract as well. Additionally, as shown above and illustrated by the references themselves, the references do not suggest these and other limitations of the claimed invention.

Mosler

Further adding Mosler to the mix does not cure the deficiencies of the hypothetical combination as it relates to the claimed invention. Mosler relates to trading a standardized contract (Abstract; col. 4, lines 25-45; col. 14, lines 22-32). Mosler discusses an interest rate swap, where two parties agree to make payments to each other to insulate a party from changing interest rates (Abstract, col. 1, lines 24-42, col. 7, lines 9-62). In Mosler, a net present value is an interest rate or notional cash flow (col. 7, lines 9-22). The net present value is used as a model price and not as a factor, such as a discount factor, used in a calculation of an actual tick value and amount of money to clear the convex futures contract (col. 7, lines 23-50). The model price becomes the settlement price (col. 7, lines 23-50).

Mosler envisions trading a standardized contract. (Abstract; col. 4, lines 25-45; col. 14, lines 22-32). Mosler discusses an interest rate swap, where two parties agree to make payments to each other to insulate a party from changing interest rates. (Abstract; col. 1, lines 24-42; col. 7, lines 9-2). In Mosler, a net present value is an interest rate or notional cash flow. (col. 7, lines 9-22). The net present value is used as a model price. (col. 7, lines 23-50). The model price becomes the settlement price. (col. 7, lines 23-50).

A discount value is not determined from the settlement price in Mosler. Additionally, no tick value, let alone a base and an actual tick value, is found in Mosler. Furthermore, the model pricing of Mosler (col. 7, lines 35-50, col. 24, lines 25-52) does not teach or suggest determining the amount of money to be transferred.

Ginsberg

Although not recited in the rejection under 103, the Examiner also mentions a Ginsberg reference. The Applicant assumes that the Examiner is referring to U.S. Patent No. 6,754,639. Ginsberg relates to a data processing system receives a continuous stream of real time transactional data regarding market transactions of fixed income securities. Abstract. The incoming data is qualified and then used to determine the term structure of interest rates based on price information. Abstract. The system provides linear interpolation techniques to complete an operative data set. Abstract. This set is updated with current trade data, with term structure shifting using pivot points from newly qualified data. Abstract. An index value for a pre-select portfolio of securities is then calculated and expressed in terms of price relative to par, yield to maturity and duration. Ginsberg does not teach or suggest the convex futures contract of the pending claims, nor does it provide disclosure necessary to render the price determination of the pending claims obvious when taken either alone or in combination with any of the above references.

None of the references teach a variable tick value, wherein the variable tick value changes based on a daily closing value for the futures contract. Additionally, none of

Wagner, Daughtery, Ginsberg and Mosler discloses the method of transferring funds based on the settlement amount to trade the futures contract.

Assuming, for the sake of argument, that one of ordinary skill in the art would look at Wagner and combine it with Daughtery and then combine it again with Ginsberg and then combine it even further with Mosler, the hypothetical combination of Wagner with Daughtery and with Ginsberg and with Mosler does not teach or suggest the input information received in claims 1-17 and 20 of the present application. The combination does not teach or suggest computing a discount factor from the settlement price, determining an actual tick value by applying the discount factor to the base tick value, and specifying an amount of money a clearing entity must transfer between a buyer and a seller for clearing a convex futures contract by applying the actual tick value to a difference between trade price data and the settlement price. Each of these elements is a limitation recited in claims 1-17 and 20. These limitations are simply not present in the combination of references. The combination does not teach or suggest the computer-assisted transfer and documentation for convex futures contract clearing as recited in claims 1-17 and 20.

Additionally, obviousness under section 103 requires a suggestion to combine and the presence of all claimed elements in the combination and not just a general goal of greater capabilities. Furthermore, a person of ordinary skill in the art looking at Wagner and at Daughtery and at Ginsberg and at Mosler either separately or at the same time would not have the required appreciation of the claimed invention necessary by statute and Federal Circuit case law. The Applicant has clearly demonstrated differences

between the processing of the pending claims and the disclosure of the cited art.

Additionally, the fact that four references are needed to even make an argument of obviousness is further evidence of the novelty of the pending claims.

Any theoretical combination of Wagner, Daughtery, Ginsberg and Mosler would also not teach the limitations of dependent claims 2-15 and 17. The additional limitations recited in dependent claims 2-15 and 17, such as limitations relating to generation and display of a cumulative price quote or price for a floor option, communicating data to a second computer system, publication, conveying information, etc., are not taught or suggested by the above cited art.

The Applicant respectfully submits that an examination of these references does not teach or suggest the limitations of the claimed invention to one of ordinary skill in the art at the time of invention. Even a theoretical combination of these prior art patents does not provide an appreciation of all of the elements of the claimed invention, as required by statute and case law. Therefore, the Applicant respectfully requests allowance of the pending claims 1-17 and 20.

Docket No. 12770US01

CONCLUSION

For the foregoing reasons, the Applicant respectfully submits that the pending

claims define allowable subject matter. Should anything remain in order to place the

present application in condition for allowance, the Examiner is invited and encouraged to

contact the undersigned at the telephone number listed below.

The Examiner is authorized to charge any additional fees or credit overpayment to

the Deposit Account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

Respectfully submitted,

Date: September 20, 2006

Christopher N. George Registration No. 51,728 Attorney for Applicant Patrick J. Arnold, Jr.

Registration No. 37,769 Attorney for Applicant

MCANDREWS, HELD & MALLOY, LTD. 500 West Madison Street, 34th Floor Chicago, Illinois 60661

Telephone: (312) 775-8000 Facsimile: (312) 775-8100